



Jordan Civil Aviation Regulatory Commission

Guidance Procedure: AWS 22

Aircraft Ramp Inspection

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Abbreviations**

AOC	Air Operator Certificate
AWSD	Airworthiness Standards Department
CARC	Civil Aviation Regulatory Commission
CAMO	Continuing Airworthiness Management Organization
Cat.	Category
CEO	Chief Executive Officer
JCAR	Jordan Civil Aviation Regulations





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I. Purpose

This procedure is intended to provide the airworthiness inspectors with the guidelines for; conducting the maintenance ramp inspection of an in-service aircraft in an operational environment and sampling the quality of maintenance and the degree of compliance with the established maintenance standards and procedures by direct inspection of aircraft rather than conducting a full airworthiness review of aircraft or evaluation of an in progress maintenance.

II. Distribution

The holders of this procedure are the airworthiness inspectors and other interested personnel of CARC and industry.

III. Amendments

Amendments to this procedure are proposed by the airworthiness and the interested personnel, reviewed by the Director Airworthiness Standards and approved by the Chief Commissioner/CEO.

IV. Applicability

Ramp inspections should cover a variety of areas and range in scope from inspection of an entire aircraft to a review of aircraft documentation. The scope of the ramp inspection includes inspection of:

- A. Flight deck
- B. Cabin/Safety
- C. Aircraft external condition
- D. Cargo
- E. General

It is not possible to cover all items at every ramp inspection, if a weakness is known or suspected in a particular part of an aircraft or in a particular phase of maintenance or area, emphasis should be placed in these areas, therefore, ramp inspection should be arranged and be planned to cover high-risk items and to cover all other items over a series of inspections.





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V. Process and Procedure

Ramp inspection should be conducted with a minimum interruption to maintenance operations and passenger handling, coordination between all inspectors involved in a ramp inspection is essential for proper completion of that inspection.

The inspector will advise the person in charge of the affected maintenance and areas of interest to his/her (the inspector's) mission. He/she will normally discuss activities with certifying staff, inspectors and mechanics, but he/she will address shortcomings or need for corrective action to appropriate supervisory or management personnel.

The guidelines for conducting a maintenance ramp inspection are provided in a checklist, CARC form 18-306 "Airworthiness Ramp Inspection Checklist", additional guidelines are provided in Part-2 of the ODG Order 90-04A "Conducting Aircraft Physical Inspection". The individual inspector will use the guidelines as a tool for prompting his/her memory in light of his/her general knowledge of a particular airplane and/or operator.

VI. Ramp Inspection Planning

Airworthiness Standards Department (AWSD) continuous surveillance program consider 25% of an in-service aircraft to be covered by means of a ramp inspection, others shall be covered by the airworthiness review and certificate of airworthiness renewal processes.

Accordingly, the ramp inspection activities will be determined at the beginning of each year and will be appeared in AWSD monthly plan detailing the operator, the aircraft type, the registration marks and the assigned Airworthiness Inspector.

Based on the outcome of the conducted ramp inspection on a specific aircraft, AWSD may arrange additional inspections and reviews ranging from ramp inspections to full airworthiness reviews of that aircraft or base the validity and the renewal of the Airworthiness Review Certificate and the Certificate of Airworthiness on a satisfactory outcome of a ramp inspection and proper airworthiness review report and recommendation issued by the responsible CAMO authorized staff.





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VII. Ramp Inspection reporting and findings

The appropriate areas of the ramp inspection checklist covered during individual ramp inspection shall be completed and where remarks were noted, these shall be completed as well.

Remarks are transferred to CARC Form 18- 261 “Audit/Inspection Follow-up Report”, where the non-compliances shall be detailed and categorized.

Non-compliances are categorized as category 1 finding, category 2 or category 3. A description of these findings is as follows:

- A category 1 finding is considered to have a minor influence on safety,
- A category 2 finding may have a significant influence on safety, and
- A category 3 finding may have a major influence on safety

Note: Any other safety relevant issues identified during a ramp inspection, although not constituting a finding, can be reported as a General Remark (Cat G) under each inspection item, for example: an electrical torch missing or unserviceable during a flight conducted entirely in daylight.

In the case of a suspect category 3 finding, Director Airworthiness Standards shall be advised, and then the Airworthiness Inspector(s) will immediately advise the air operator personnel of the situation. If as a result of discussions with the air operator and further evaluation of the issues involved, the finding is confirmed, immediate action shall be taken to demonstrate proper corrective action before further flight.

The airworthiness Inspector(s) shall immediately advise the responsible CAMO organization verbally of the outcome and formally advise the organization in writing of the finding within 72 hrs.

If the root cause of the finding identifies a non-compliance with any other CARC regulation, the non-compliance shall be dealt with as prescribed by the relevant regulation.

For category 1 and category 2 findings, the corrective action period, *this may include corrective action before further flight for category 2 findings*, granted by the Airworthiness Inspector(s) must be appropriate to the nature of the finding, but in any case must not be more than three months.





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After receipt of notification of findings, the air operator/CAMO shall define a corrective action/action plan and demonstrate corrective action to the satisfaction of CARC/AWSD within a period agreed with CARC/AWSD.

VIII Ramp Inspection Records

It is essential that adequate records be kept in order to make a determination on high-risk items and to properly plan the ramp inspections activities.

The ramp inspection records shall include as a minimum:

- The completed ramp inspection checklist CARC form 18-306 “Airworthiness Ramp Inspection Checklist”;
- The completed CARC Form 18-261 “Audit/Inspection Follow-up Report”,
- Copies of all relevant correspondences;
- The corrective actions/or action plan submitted by the organization and CARC/AWSD acceptance of the same.

The minimum retention period for ramp inspections’ records shall be six years.





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IX Appendices

- 1) Appendix-1: CARC Form 18-306 "Ramp Inspection Checklist".





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Appendix-1

Airworthiness Standards Department

Ramp Inspection Checklist

Inspector(s) Name(s)	1.	Report No.		Date	
	2.	Operator's Name		Airport/location	
AC Type		MSN		AC REG.	

<u>A</u>	<u>Flight Deck</u>	<u>Reference</u>	<u>JCAR</u>	<u>YES</u>	<u>NO</u>	<u>Remarks</u>
A1	General Condition Check cleanliness, tidiness and general condition. Check for inappropriately pulled Circuit Breakers. serviceability of seats.	Annex 6 P I Ch 13	M.710			
A2	Emergency Exit Check if in compliance with the requirements. Check serviceability of exits.	Annex 8 P III Ch. 4.1.7	25.809 25.811 25.812 25.813			
A3	Equipment (a) GPWS Check for the presence and proper functioning of the equipment. (b) TCAS/ACAS II Check for the presence of the equipment. Check that the system test is passed. Note: To meet the requirement a TCAS II Version 7 (RTCA DO-185A) shall be installed. In addition a Mode S transponder compatible with ACAS II shall be installed. (c) 8.33 kHz Check that radio equipment is 8.33 kHz channel spacing capable. This can be checked by requesting to select an 8.33 kHz channel. for example, 132.055 kHz on the radio control panel. The panel should normally show 6 digits – however some radio control panels may omit the leading “1” and display only 5 digits. e.g. 32.055. The carriage of 8.33 kHz channel spacing capable radio equipment is mandatory for operations in the specified ICAO EUR. (d) RNAV Check that the airline is authorized to perform operations in RNAV Airspace. Check installed equipment meets applicable requirements. (e) RVSM Check that the airline is authorized for operations in a RVSM airspace. Check installed equipment meets applicable requirements.	Annex 6 P I Ch. 6.15 ICAO Doc. 7030/4 (EUR/RAC-5) ICAO Doc. 7030/4 (EUR/RAC-5) Annex 6 P I Ch7. Annex 6 P I Ch 7.	OPS 1.665 OPS 1.668 OPS 1.240 Appendix-1 to OPS 1.175, OPS 1.241			
A4	Documentation Manuals Check if manuals are up-to-date and approved. Check if their content complies with the requirements.	Annex 6 P I Ch. 4.2.2	OPS 1.125, OPS 1.130 OPS 1.135			





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A5	Checklists Check if checklists are available, within reach and recent.	Annex 6 P I Ch. 6.1.3	OPS 1.130 OPS 1.135			
A6	Certificate of registration Check for presence and accuracy. Check the following information to be included in the C o R for accuracy: <ul style="list-style-type: none"> Nationality and/or registration mark. Manufacture and or manufacturer designation of aircraft Aircraft serial number Owner's name Address of owner Reference to applicable regulations 	CC Article 29 Annex 7 Ch. 7	OPS 1.125 47.31 Form 233 Form 234			
A7	Noise certificate or equivalent (where applicable) Check for presence and accuracy.	Annex 16 Vol. 1 P1 & 2. Annex 6 P I Ch. 6.13	Form 18-217, 21. Subpart I, OPS 1.125			
A8	AOC Check for accuracy [a copy is acceptable]. Check if its content is in compliance with the Check for accuracy [a copy is acceptable]. Check if its content is in compliance with the requirement.	Annex 6 P I Ch. 4.2.1	OPS 1.125			
A9	Radio license Check for presence and validity.	CC Article 29&30	OPS 1.125			
A10	Certificate of Airworthiness (C of A) Check that the certificate of Airworthiness of the aircraft is carried on board. Check for presence, accuracy and validity.	CC Article 29&31 Annex 8 PII	OPS 1.125			
A11	Weight and balance sheet Check for presence of load and balance sheet and accuracy.	Annex 6 P I APP 2	OPS 1.625			
A12	Hand fire extinguishers Check for presence, access, sufficient numbers, condition and where applicable expiry date.	Annex 6 P I Ch. 6.2.2	OPS 1.790			
A13	Life jackets/ Flotation device Check for presence, access, condition and where applicable expiry date.	Annex 6 P I Ch. 6.5	OPS 1.825			
A14	Harness Check for presence and condition.	Annex 6 P I Ch. 6.2.2.c.3	OPS 1.320			
A15	Oxygen equipment Check for presence, access and condition. Check oxygen cylinder pressure.	Annex 6 P I Ch. 4.3.8	OPS 1.760. OPS 1.770			
A16	Flash Light Check their condition, serviceability and access.	Annex 6 P I Ch. 6.10	OPS 1.630. OPS 1.640			





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A17	Journey Log Book / Technical Log Check for presence.	CC Article 29&34	M.306, OPS 1.1071			
A18	Maintenance Release Check that performed maintenance has been signed off. (checkmark or sign). Check for validity and verify that the maintenance release has not expired. Check that the relevant release for service has been issued. Check for evidence that any maintenance required in the tech log has been complied with. When the aircraft is operated under ETOPS , verify that the requirements are met.	Annex 6 P I Ch 1	M, Subpart H OPS 1.875			
A19	Defect notification and rectification (incl. Tech Log) Check number of deferred defects (specify in the report where necessary). Check that all defects (minor, major, dents, damages etc.) have been notified. Check that defect deferments include time limits and comply with the stated time limits. Check compliance with the aircraft MEL.	Annex 6 P I Ch 6.1.2	M.403, M.306			
A20	Pre-flight inspection Check for presence of pre-flight inspection sheet. Check that the pre-flight inspection is performed. (signature or checkmark/box)	Annex 6 P I Ch. 4.3.1.	M.301.			
B	<u>Safety/Cabin</u>	<u>Reference</u>	<u>JCAR</u>	<u>YES</u>	<u>NO</u>	<u>Remarks</u>
B1	<u>General Internal Condition</u> Check for cleanliness, tidiness and general condition. Check for loose carpet, and/or loose or damaged floor panels.	_____				
B2	<u>Safety and Survival equipment</u> Prescribed safety and survival equipment which the crew or passengers are expected to use and operate at the time of an emergency, shall be reliable, readily accessible and easily identified, and its method of operation shall be plainly marked.	Annex 8 P III Ch.8.3	M.301.			
B3	<u>First Aid Kit / Emergency medical kit</u> Check for presence at indicated location, adequacy, readily accessible and identification.	Annex 6 P I Ch. 6.2.2.a	OPS 1.745, OPS 1.755			
B4	<u>Hand fire extinguishers:</u> Check for presence, number, access, and condition and expiry date if available.	Annex 6 P I Ch. 6.2.2	OPS 1.790			
B5	<u>Life jackets/ Flotation device</u> Check for presence, access, number, and condition and expiry date as applicable.	Annex 6 P I Ch. 6.5	OPS 1.825			





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B6	<u>Seat belt and seat condition</u> Check for presence, number and condition of seat belts. Verify the condition of the passenger cabin seats.	Annex 6 P I Ch. 6.2.2	OPS 1.320			
B7	<u>Emergency exit, lighting and marking, torches</u> Check for presence and condition of emergency exit signs, lighting and marking, torches. Where relevant, check condition of floor path marking. Note: floor path marking lights can also be build into the lower side of the aisle Seats.	Annex 8 P III	OPS 1.815			
B8	<u>Lighting and marking</u> Emergency lighting shall be provided and shall have the following characteristics: a) independence from main electrical supply; b) automatic activation upon loss of normal power/impact; c) visual indication of the path to emergency exits in smoke-filled cabin conditions; d) illumination both inside and outside the A/C during evacuation; and e) no additional hazard in the event of fuel spillage. All A/C, when operated at night shall be equipped with lights in all passenger compartments.	Annex 6 P I Ch. 6.10	OPS 1.815			
B9	<u>Slides/Life-Rafts (as required), ELT</u> Check bottle gauge, slide bar and slide expiry date. Check for correct installation and location. Check presence of ELTs, condition and type of ELT installed, and expiry date (if applicable). The ELT could be Installed in the slide raft/life raft pack. Check if ELT transmits on 406 MHz.	Annex 10 P III Ch 2	OPS 1.830			
B10	<u>Oxygen Supply (Cabin crew & Passengers)</u> Check for their condition.	Annex 6 P I Ch 6.7	OPS 1.770			
B11	<u>Access to emergency exits</u> Check that appropriate access to emergency exits is provided and that it is not impeded by e.g. not-anymore-foldable cabin crew seat. Check that cabin attendant's seats return quickly to upright position.	Annex 8 P III	CS 25.807			
B12	<u>Safety of passenger baggage</u> Check that size, quantity and weight of baggage does not pose a risk to safety.	Annex 6 P I Ch. 4.8	OPS 1.270			
C	<u>A/C Condition</u>	<u>Reference</u>	<u>JCAR</u>	<u>YES</u>	<u>NO</u>	<u>Remarks</u>
C1	<u>General external condition</u> Check general condition of the airframe: apparent corrosion; cleanliness; presence of ice, snow, frost; legibility of markings, windshield delamination, damages, exterior lights etc.	Applicable MEL, AMM, CDL, SRM etc	M.710 (C)			





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C2	<u>Doors and hatches</u> Check for door external markings, operation instructions and condition of hatches.	Applicable MEL, AMM, SRM etc	M.710 (C)			
C3	<u>Flight controls</u> Check external Flight Controls as fitted to wings, tailplane and fin. Check for condition, leaks, wear, obvious damage, corrosion, disbonding, evidence of lightning strikes, dents, looseness of fittings, missing static discharges, etc.	Applicable MEL, AMM, SRM etc	M.710 (C)			
C4	<u>Wheels, tyres and brakes</u> Inspect for damage, wear and signs of under inflation. When possible, check for correct tyre pressure and proper lubrication.	Applicable AMM, or MEL	M.710 (C)			
C5	<u>Undercarriage</u> Visual inspection. Focus on lubrication, leakage & corrosion and wear on door fittings and hinges. Check for minor defects such as bonding wires missing or inspection markings/placards missing. Check for condition, lubrication, corrosion, damage and proper strut-pressure.	Applicable AMM, or MEL	M.710 (C)			
C6	<u>Wheel well</u> Visual inspection. Focus on lubrication, leakage & corrosion. Check for cleanliness and damage.	Applicable AMM, SRM or MEL.	M.710 (C)			
C7	<u>Powerplant and pylon</u> Visual inspection. Focus on dents and loose/missing fasteners (intake) and LPT/LPC blades (where visible), obvious damage to sensors, jet pipe nozzle, cracking etc. (exhaust). Check that panels are aligned and handles are flushed. Check for unusual wear & tear and leaks.	Applicable AMM, SRM or MEL	M.710 (C)			
C8	<u>Fan blades</u> Visual inspection. Check for FOD damage, cracks, cuts, corrosion, erosion etc.	Applicable AMM, SRM.	M.710 (C)			
C9	<u>Propellers</u> Visual inspection. Check for corrosion, looseness of blades in hub, propeller de-icing system, stone damage etc.	Applicable AMM, SRM, MEL.	M.710 (C)			
C10	<u>Obvious repairs</u> Visual inspection. Notify repairs of unusual design or badly performed.	Annex 6 P I Ch 1 & Applicable AMM, SRM	M.710			
C11	<u>Obvious unrepaired damage</u> Visual inspection. Notify un assessed and unrecorded damage including corrosion, lightning strike damage, bird strikes etc. Check that any damage is observed, assessed and possibly recorded on a damage chart (i.e. Buckle & Dent chart).	Annex 6 P I Ch 1 & Applicable AMM, SRM, MEL	M.710			





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C12	Leakage Visual inspection: fuel leaks, hydraulic leaks and toilet liquid leaks (blue ice).	Applicable AMM	M.710			
D	Cargo	Reference	JCAR	YES	NO	Remarks
D1	General condition of cargo compartment Check for cleanliness and general condition of cargo compartment. Check lighting, fire protection, detection & extinguishing system (if appropriate). Check side wall and overhead (blow-out) panels, smoke detectors, cargo/dividing nets, ceiling lights, fire extinguishers, cargo roller system and drive equipment.	Applicable AMM, MEL	M.710			
D2	Dangerous Goods If dangerous goods are on board, check that Technical Instructions as per ICAO Doc. 9284 is applied. Check that Dangerous Goods are stowed, packaged and labeled in accordance with the Technical Instructions (ICAO Doc. 9284).	Annex 6 P I Ch 1 Annex 18	OPS 1 SUBPART- R			
D3	Safety of cargo on board Check that loads are properly distributed (floor limits, pallets and containers maximum gross weight). Check flight kit and spare wheels securing. Check that cargo is correctly secured. Verify presence and condition of lockers and restraints pallets, nets, straps and containers condition and heavy items securing in containers.	Annex 6 P I Ch. 4.3.1	OPS 1.270			
E	General	Reference		YES	NO	Remarks
E1	General Check (if appropriate) for any general item which may have a direct relation with the safety of the aircraft or its occupants.					

